

Claims.

1. Connector plug for a multi-conductor cable (12) including a set of power conductors (30) and a set of signal conductors (31), comprising a casing (10) with a cable receiving opening (11) at its rear end, a number of contact elements (42,43) at its forward end connected to said power conductors (30) and said signal conductors (31) and arranged to engage contact elements on a connectable matching connector plug or jack, and a transition chamber (17) located in said casing (10) between said cable receiving opening (11) and said contact elements (42,43) and penetrated by said power conductors (30) and said signal conductors (31),

characterized in that said transition chamber (17) comprises a coiling core element (18;118) mounted in said casing (10) and forming a separate routing path (41,42) for each one of said set of power conductors (30) and said set of signal conductors (31), wherein each routing path (40,41) provides an added length and a slack in each one of said set of power conductors (30) and said set of signal conductors (31) for absorbing cable bending related length changes of said power conductors (30) and said signal conductors (31).

2. Connector plug according to claim 1, wherein said coiling core element (118) comprises two oppositely located trunnion like studs (119,120), each one of said studs (119,120) extends in a direction transverse to the longitudinal direction of the casing (10) and forms a routing path defining winding core for either one of said sets of power conductors (30) and signal conductors (31).

3. Connector plug according to claim 1, wherein said coiling core element (18) comprises two screw shaped external channels extending symmetrically about an axis which extends substantially in the longitudinal direction

of the casing (10), said channels forming said routing paths (40,41) through said transition chamber (17).

4. Connector plug according to anyone of claims 1 - 3, wherein an anchoring device (37,38) is provided for securing the cable (12) to the casing (10), said anchoring device (37,38) comprises a non-conductive tension wire (35) extending throughout the cable (12) in parallel with said power conductors (30) and said signal conductors (31), said tension wire (35) is connected to said coiling core element (18;118).

5. Connector plug according to claim 4, wherein said anchoring device (37,38) comprises a stop member (37) rigidly secured to said tension wire (35), said coiling core element (18;118) is formed with a socket portion (38) for receiving and positively locking said stop member (37) relative to said coiling core element (18;118).

6. Connector plug according to anyone of claims 1-5, wherein a conductor support plate (15) of a non-conductive material is mounted in the casing (10) between said coiling core element (18;118) and said contact elements (42,43), said support plate (15) is disposed in a plane transverse to the longitudinal direction of the casing (10) and comprises a through aperture for each conductor (30,31).

7. Connector plug according to claim 6, wherein said support plate (15) is made of a resilient material.